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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,060	09/13/2002	Takashi Inui	JP920010216U	2592
25299	7590	05/05/2005	EXAMINER	
IBM CORPORATION PO BOX 12195 DEPT 9CCA, BLDG 002 RESEARCH TRIANGLE PARK, NC 27709			HUYNH, KIM T	
			ART UNIT	PAPER NUMBER
			2112	

DATE MAILED: 05/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/065,060	Applicant(s) INUI ET AL.	
	Examiner Kim T. Huynh	Art Unit 2112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/7/04.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 September 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information-Disclosure-Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by
Tachibana et al. (US Patent 6,055,595)

As per claim 1, Tachibana discloses apparatus comprising:

- an interface(fig.3, 17a-n, ie slot) which provides removable connection to a plurality of expansion devices(fig.3, 171, ie pc card); (col.2, lines 10-11)
- an information storage unit (fig.3, 32, ie register)for storing settings information which indicates whether the expansion devices connected to said interface are removable; and (col.2, lines 8-25)
- a listing unit for listing the expansion devices removable from said interface, based on said settings information stored in said information storage unit; (col.2, lines 8-25, wherein various of cards make up list which stored in register 32 equivalent to a listing unit)
- said information storage unit and said listing unit together comprising an interface which allows expansion devices to be attached and detached.
(col.5, lines 47-56)

As per claim 2, Tachibana discloses the apparatus further comprising a setting change unit for changing said settings information stored in said information storage unit, based on outside requests. (col.5, lines 47-col.6, lines 37, wherein operation system receives information of pc card into pc slots implies based on outside requests)

As per claims 3, 14, Tachibana discloses wherein said information storage unit is a non-volatile memory which stores information referenced by BIOS (basic input/output system). (col.5, lines 47-col.6, lines 37, wherein operation system 31 receives information of pc card 171 into pc slots 17a-n via the card controller (input/output from/to slots) implies BIOS)

As per claim 4. Tachibana discloses apparatus comprising:

- an interface section having a plurality of interfaces, each interface providing removable connection to a plurality of expansion devices; (col.2, lines 10-11)
 - a listing section for displaying a list based on settings information which indicates whether to permit removal of an expansion device from each of said interfaces; (col.6, lines 22-37)
 - a specification acceptance section for accepting specification of a specific interface from among said interfaces contained in said list; and (col.6, lines 11-21, wherein ID implies specific interface)
-

- an unloading section for unloading a driver for the expansion device connected to said specific interface to allow the expansion device to be removed; (col.5, lines 57-64, wherein erases information implies unloading a driver of expansion device)
- said listing section and said specification acceptance section together comprising the plurality of interfaces which allow the expansion devices to be attached and detached. (col.2, line 65-col.3, line 19)

As per claim 5, Tachibana discloses wherein said listing section lists only the interfaces from which removal of expansion devices is permitted. (col.3, lines 20-39)

As per claim 6, Tachibana discloses wherein said specification acceptance section accepts only the specification of the interfaces from which removal of expansion devices is permitted. (col.3, lines 20-39)

As per claim 7, Tachibana discloses apparatus further comprising a choice acceptance section for accepting choices as to whether or not removal of the expansion device from each of the plurality of interfaces should be permitted. (col.6, lines 11-45, wherein detects implies whether or not for permission)

As per claim 8, Tachibana discloses a method comprising the steps of:

- displaying an explicit list of removable expansion devices in response to a certain operation, based on an information list which indicates whether the expansion devices are removable from a computer device; (col.6, lines 11-45)
- accepting specification of a specific expansion device from among the expansion devices listed explicitly; and (col.6, lines 11-45)
- unloading said specified specific expansion device from a system of said computer device. (col.6, lines 38-45)

As per claims 9, 15, Tachibana discloses wherein said step of displaying said explicit list comprises steps in which:

- an OS (Operating System) of said computer device makes an inquiry to a BIOS; (col.5, lines 47-col.6, lines 37, wherein operation system 31 receives information of pc card 171 into pc slots 17a-n via the card controller (input/output from/to slots) implies inquiry to BIOS)
 - the BIOS replies as to whether or not each of the expansion devices is removable, with reference to the information list; and (col.5, line 47-col.6, line 45)
 - the OS indicates a list of removable expansion devices explicitly based on a reply from the BIOS. (col.3, lines 20-39)
-

As per claim 10, Tachibana discloses the method further comprising the steps of:

- receiving, from outside, settings concerning whether the expansion devices are removable from said computer device and generating settings information based on the received settings; and (col.5, line 47-col.6, line 3)
- generating the information list with reference to said settings information during system startup of said computer device. (col.3, lines 20-39)

As per claim 11, Tachibana discloses wherein when the settings concerning whether or not the expansion devices are removable from said computer device are received from the outside, said step of generating settings information stores the settings information generated based on the received settings in a non-volatile memory which stores data referenced by a BIOS of said computer device.

As per claim 12, Tachibana discloses program product comprising:

- a computer readable medium; (col.3, lines 30-39)
 - a computer executable program stored on said computer readable medium for execution on a computer device, said computer executable program being effective in executing the steps of: (col.3, lines 20-39)
 - detecting expansion devices connected to the computer device; (col.6, lines 11-45)
-

- accepting specification as to whether or not removal of said detected expansion devices from the computer device is prohibited; and (col.2, line 65-col.3, line 19)
- displaying a list of expansion devices, excluding the expansion devices which are prohibited from being removed, when requested to display a list of the expansion devices connected to the computer device. (col.6, lines 11-45)

As per claim 13, Tachibana discloses wherein said process of accepting specification is executed if a certain operation is performed during system startup of the computer device. (col.3, lines 20-39)

14. The program product according to claim 13, wherein said process of accepting specification stores information about said specification in a non-volatile memory which stores data referenced by a BIOS of the computer device.

Response to Amendment

3. Applicant's amendment filed on 2/7/05 have been fully considered but does not place the application in condition for allowance.

a. Applicant argues that Tachibana does not disclose an information storage unit for storing settings information which indicates whether the expansion devices connected to said interface are removable. Examiner respectfully disagrees. As Tachibana notes at (col.2, lines 8-25, discloses acquiring information indicating data of

insertion/removal and type of card inserted into or removed from the card slot by referring to device information held in the registry 32. The acquiring information stored in the registry 32 is equivalent storing settings information in the storage unit as applicant claimed. It reads on the breadth of the claimed languages therefore it is properly stated in the rejection of record.

b. Applicant argues that Tachibana does not disclose a listing unit for listing the expansion devices removable from said interface, based on said settings information stored in said information storage unit. Examiner respectfully disagrees. As Tachibana notes at (col.2, lines 8-25) discloses operating system having a registry 32 for registering card/program registration information indicating correspondence between cards information and program for effecting processes for the respective cards into registry 32. Registering registration information of cards which can be inserted/removed from slots(interfaces) stored in registry 32 is equivalent to applicant claims, therefore it is properly stated in the rejection of record.

c. Applicant argues that Tachibana does not disclose said information storage unit and said listing unit together comprising an interface which allows expansion devices to be attached and detached. Examiner respectfully disagrees. As Tachibana notes at (col.5, lines 47-56) discloses registers information relating to inserted/remove(attached/detached) cards to/from slots(interfaces) via controller and so the list registration information (the setting information) stored in registry 32. It reads on the breadth of the claimed languages therefore it is properly stated in the rejection of record.

d. Applicant argues that Tachibana does not disclose a listing section for display a list based on settings information which indicates whether to permit removal of an expansion device from each of said interface. Examiner respectfully disagrees. As Tachibana notes at col.6, lines 22-37, discloses the registration information on registry 32 displayed on the display screen. It reads on the breadth of the claimed languages therefore it is properly stated in the rejection of record.

e. Applicant argues that Tachibana does not disclose a specification acceptance section for accepting specification of a specific interface from among said interfaces contained in said list. As Tachibana notes at col.6, lines 11-21, discloses operating system issue device information held in the registry and acquires information indicating data of insertion/removal of cards to/from slots. Information such as ID of card , each of these cards(with specific ID) can be inserted/removed with respect to specific slots (interfaces). It reads on the breadth of the claimed languages therefore it is properly stated in the rejection of record.

f. Applicant argues that Tachibana does not disclose an unloading section for unloading a driver for the expansion device connected to said specific interface to allow the expansion device to be removed. As Tachibana notes at col.5, lines 57-64, discloses the operating system receives information that card is removed, the operating system erases information (driver) relating to the removed card and registered in the registry. It reads on the breadth of the claimed languages therefore it is properly stated in the rejection of record.

g. Applicant argues that Tachibana does not disclose detecting expansion devices connected to the computer system. Examiner respectfully disagrees. As Tachibana notes at (col.6, lines 11-45) discloses program detects the message device-change indicating that the device environment is changed, the environment change implies detecting devices connected/removed to/from system. It reads on the breadth of the claimed languages therefore it is properly stated in the rejection of record.

h. Applicant argues that Tachibana does not disclose a setting change unit for changing said setting information stored in said information storage unit, based on outside requests. Examiner respectfully disagrees. As Tachibana notes at col.5, line 47-col.6, line 37, discloses the setting section 43 of the program makes a change and addition of card registration information on the registry via displayed on a display screen in response to an instruction from the user(based on outside requests). It reads on the breadth of the claimed languages therefore it is properly stated in the rejection of record.

j. Applicant argues that Tachibana does not disclose wherein said information storage unit is a non-volatile memory which stores information referenced by BIOS. Examiner respectfully disagrees. As Tachibana notes at col.5, line 47-col.6, line 37 discloses device information held in the memory such as the RAM(non-volatile memory). It reads on the breadth of the claimed languages therefore it is properly stated in the rejection of record.

k. Applicant argues that Tachibana does not disclose a choice acceptance section for accepting choices as to whether or not removal of the expansion device from

each of the plurality of interfaces should be permitted. Examiner respectfully disagrees. As Tachibana notes at col.6, lines 11-45, discloses each of cards has each ID information to be inserted/removed to/from slots(interfaces). Each of slots will/will not accept the cards whether it is correlated with the right cards for the right slots. The setting section to make the change and addition of registration information on the registry via displayed on the screen in response to an instruction from the user. It reads on the breadth of the claimed languages therefore it is properly stated in the rejection of record.

j. Applicant argues that Tachibana does not disclose an OS of said computer devices makes an inquiry to a BIOS. Examiner respectfully disagrees. As Tachibana notes at col.5, line 47-col.6, line 37 discloses operating system 31, received information of cards to be inserted/removed(BIOS), the operating system registers information relating to the cards. And furthermore, (col.5, lines 13-28, further cited for clarification, discloses controller notifies the CPU cards inserted/removed, and drives and controls according to an instruction from the CPU. It reads on the breadth of the claimed languages therefore it is properly stated in the rejection of record.

Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. *Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim Huynh whose telephone number is (571)272-3635 or via e-mail addressed to [kim.huynh3@uspto.gov]. The examiner can normally be reached on M-F 9:00AM- 6:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached at (571)272-3632 or via e-mail addressed to [mark.Rinehart@uspto.gov].*

The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9306 for regular communications and After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-2100.



Kim Huynh

May 2, 2005

**PAUL R. MYERS
PRIMARY EXAMINER**